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10/083,075	02/26/2002	Richard Dean Dettinger	ROC920020044US1	4713

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EXAMINER
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LIANG, GWEN

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/083,075

Applicant(s)

DETTINGER ET AL.

Examiner

GWEN LIANG

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is responsive to communications regarding the applicant's amendment, filed on 2/25/2005.

#### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: FIG. 2A and FIG. 2B, which need to be separately described in the specification in section "BRIEF DESCRIPTION OF THE DRAWINGS". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Response to Arguments***

3. Applicant's arguments with respect to all the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 27, 33, 38, 44 and 49 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/131984. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

The instant application claim 27, featuring "a method comprising: providing a plurality of logical field definitions, each of the definitions comprising a logical field name, at least one location attribute identifying a location of physical data corresponding to the logical field name, and a reference to an access method ... defines a different manner of exposing the physical data corresponding to the logical field name of the respective logical field definition; and providing, for a requesting entity, a query specification defining an interface to the plurality of logical field definitions

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thereby allowing abstract queries to be composed on the basis of the plurality of logical field definitions”, corresponds to the aforementioned conflicting application claim 1, featuring “a method comprising providing a data abstraction model comprising a plurality of logical fields for defining an abstract query; for each of the plurality of logical fields, providing an access method ... and a location of the data ...; receiving the abstract query from a requesting entity ...; transforming the abstract query...; accessing a data repository specified by the location in the access method ...”.

Claims 33, 38, 44, and 49 are rejected on grounds corresponding to the reasons given above for claim 27.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 27-30, 32-42, 44-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingberg et al. “Kingberg”, (U.S. Patent No. 5,734,887), and further in view of Martin et al., “Martin “ (U.S. Patent No. 6,553,368).

With respect to claim 1, Kingberg discloses a method ...comprising:

providing a plurality of logical field definitions, each of the definitions comprising a logical field name ((See Figures 5(A)-5(D)), at least one location attribute identifying a location of physical data corresponding to the logical field name (col. 8 lines 8-19; col. 27 lines 57-64, wherein it is inherent that a location attribute has to exist for the Data Mapping logical to Physical Table to map logical entities types and their associated logical attributes into physical database tables and columns; Figures 8(A)-8(C)), and

providing, for a requesting entity, a query specification defining an interface to the plurality of logical field definitions thereby allowing abstract queries to be composed on the basis of the plurality of logical field definitions (Abstract, "The Applications then use a Logical Data Access Interface to access each of the required physical relational database tables via the Logical Data Access Layer. Applications then use logical entity type and logical entity type attribute names as specified in the Logical Data Model in making Logical Data Requests to the Logical Data Access Layer. The Logical Data Access Layer provides a rich set of functions for allowing an Application to control and manage a database, build and execute database queries and interface with physical database. The Logical Data Access Layer determines which of the physical tables and associated columns are required to satisfy the Application request and then builds one or more database query statements containing the appropriate physical table and column names."; col. 4, lines 52-54; col. 4, lines 59-62; col. 5, lines 5-10; col. 10, lines 37-39, "The LDAI permits the Application to build database queries using only the Logical Data Model Specification.").

However Kingberg does not explicitly disclose a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data ...

Martin discloses a reference to an access method selected from at least two different access method types; wherein each of the different access methods types defines a different manner of exposing the physical data ... (Abstract, "The directory service then uses the access method for the environment to access the information available in the environment. In this manner, data in the given environment can be accessed by a directory service operable under the given protocol by configuring an attribute access method and using this method to retrieve the information"; col. 2, lines 28-33, "Thus, a preferred embodiment of the invention uses the Directory Access Control Domain (DACD) as defined in the ISO/CCITT X.501 (1993 E) specification not only to store access rights but also to store access methods. The access method points to a directory entry storing the specific access method parameters. "; col. 2, lines 47-50, "the directory service being configured to respond to an access request under the protocol to access the information in said environment using an access method identifier"; col. 6, lines 58-64, "More generally, an embodiment of the invention can provide access to data in a predetermined environment (e.g. data stored in accordance with a different storage model from that on which the predetermined protocol is based, or a different physical location, or a different protocol) by configuring an attribute access method and using this method to retrieve the information from, for example a directory operable in the predetermined environment").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a method providing a reference to an access method ... as disclosed by Martin into the method of providing a plurality of logical field definitions as disclosed in Kingberg to provide access to data in a predetermined environment (e.g. data stored in accordance with a different storage model from that on which the predetermined protocol is based, or a different physical location, or a different protocol) by configuring an attribute access method and using this method to retrieve the information (col. 6, lines 58-64). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 28 is rejected for the reasons set forth hereinabove for claim 27 and furthermore the combination of Kingberg and Martin discloses a method wherein a first access method type is a simple access method defining a direct relationship between physical data located at a location identified by a respective location attribute of a respective logical field definition (Kingberg, col. 8 lines 8-19; Figures 8(A)-8(C)) and wherein a second access method type is a filtered access method defining a filter applied to physical data located at a location identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method (Martin, col. 5, lines 38-46).

Claim 29 is rejected for the reasons set forth hereinabove for claim 27 and furthermore Martin discloses a method wherein the access methods types comprise a filtered access method defining a filter applied to physical data located at a location



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identified by a respective location attribute of a respective logical field definition, wherein the filter removes selected data from the physical data so that only a subset of the physical data is exposed by the respective logical field definition referencing the filtered access method (col. 5, lines 38-46).

Claim 30 is rejected for the reasons set forth hereinabove for claim 27 and furthermore Kingberg discloses a method wherein the access methods types comprise a composed access method defining an expression applied to physical data located at a location identified by a respective location attribute of a respective logical field definition wherein application of the expression produces values different from the physical data to which the expression is applied (col. 11, lines 59-65).

Claim 32 is rejected for the reasons set forth hereinabove for claim 27 and furthermore Kingberg discloses a method wherein the abstract query comprises:

at least one selection criterion specifying at least one condition defined on the basis of the one or more of the plurality of logical field definitions (col. 13, lines 43-51);  
and

a result specification specifying one or more of the plurality of logical field definitions to be returned as results for the abstract: query (Abstract, "The Logical Data Access Layer determines which of the physical tables and associated columns are required to satisfy the Application request and then builds one or more database query statements containing the appropriate physical table and column names").

Claim 33 is rejected on grounds corresponding to the reasons given above for claim 27 and furthermore Kingberg discloses a method, comprising:

mapping logical fields to the physical data and wherein the abstract query is composed on the basis of the plurality of logical field definitions (Abstract, "The Logical Data Access Layer provides a rich set of functions for allowing an Application to control and manage a database, build and execute database queries and interface with physical database. The Logical Data Access Layer determines which of the physical tables and associated columns are required to satisfy the Application request and then builds one or more database query statements containing the appropriate physical table and column names"; col. 3, lines 41-67, "The computer system having a relational database management system containing a plurality of physical tables, said physical tables derived from said logical data model, each of said physical tables having a plurality of columns, the database also having a logical to physical data mapping table for mapping each logical entity type and logical attribute pair to a physical table name and a physical column name as stored in the relational database management system"); and

transforming the abstract query into a query consistent with the particular physical data representation according to the data abstraction model depending on which of the plurality of logical fields definitions area referenced by the abstract query ( Abstract, "The Logical Data Access Layer provides a rich set of functions for allowing an Application to control and manage a database, build and execute database queries and interface with physical database. The Logical Data Access Layer determines which of the physical tables and associated columns are required to satisfy the Application

request and then builds one or more database query statements containing the appropriate physical table and column names.”).

Claims 34-37 are rejected on grounds corresponding to the reasons given above for claims 28-30, 32.

Claim 38 is rejected on grounds corresponding to the reasons given above for claims 27 and 33.

Claims 39-41 are rejected on grounds corresponding to the reasons given above for claims 28-30.

Claim 42 is rejected on grounds corresponding to the reasons included in those given above for claim 33.

Claims 44-48 are rejected on grounds corresponding to the reasons given above for claims 33-37.

Claim 49 is rejected on grounds corresponding to the reasons given above for claims 38 and 44.

Claims 50-52 are rejected on grounds corresponding to the reasons given above for claims 39-41.

8. Claims 31, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingberg et al. “Kingberg”, (U.S. Patent No. 5,734,887), further in view of Martin et al., “Martin “ (U.S. Patent No. 6,553,368), and further in view of Krishnaprasad et al., “Krishnaprasad “ (U.S. Application No. 20020078068).

Claim 31 is rejected for the reasons set forth hereinabove for claim 27. However the combination of Kingberg and Martin does not explicitly disclose a method wherein

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the plurality of logical field definitions are defined within a single markup language document.

Krishnaprasad discloses a method wherein the plurality of logical field definitions are defined within a single markup language document (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a method wherein the plurality of logical field definitions are defined within a single markup language document as disclosed by Krishnaprasad into the method of providing a plurality of logical field definitions as disclosed in the combination of Kingberg and Martin. Using these techniques, the user need not be aware of the manner in which the XML documents are stored within the database in order to issue queries against the XML documents (page 1, section [0010]). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 43 is rejected on grounds corresponding to the reasons given above for claim 31.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 571-272-4038. The examiner can normally be reached on 12:00 P.M. - 8:30 P.M. Monday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

29 April 2005  
G.L.

*Gwen S. Wassum*  
Primary Examiner